

Carbon Offset Project Profile

CLEAN DRINKING WATER LIFESTRAWS® AFRICA & SOUTH EAST ASIA

Approximately 80% of the diseases in developing countries can be traced back to the consumption of contaminated water; each year more than 2 million children die due to this cause. Africa and South East Asia are especially affected.

In order to get clean drinking water, women often have to walk long distances. Even then, water is often only available in open sources – such as rivers or waterholes – and is contaminated with dirt and pathogens.

LifeStraws® purify water without the need for heat, electricity or additional tools. LifeStraws® eliminate the need to combust non-renewable biomass such as firewood as required by conventional water purification. The LifeStraws® project in Kenya alone leads to a more than 2,000,000 tCO₂e reduction in CO₂ emissions per year. LifeStraws® projects help prevent deforestation.



Key Facts:

Location: Africa & South East Asia

Project type: LifeStraws®

Project standard: Gold Standard



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Photo credit: Kate Holt

TECHNOLOGY BRIEF – HOW IT WORKS

The LifeStraw® Family system consists of two main components: a container, in which the contaminated water is filled, and a filter cartridge, which is connected to the container through a pipe. Through the filter cartridge, the purified water can be directly bottled or consumed.

The system works with a microbial filter which enables users to purify the water without any additives or electricity. Thereby up to 18,000 litres of water can be filtered with one single LifeStraw® Family system.

The quality of the water is at least as good – or even better – as water that has been purified by heating. The system only needs to be replaced after a lifespan of three years, making the LifeStraw® a safe and cost-efficient way to purify water.

SUSTAINABILITY BENEFITS

LifeStraws® projects contribute to the United Nations' Millennium Development Goals in the following ways:

Eradicate Extreme Poverty & Hunger: In the distribution phase LifeStraws® projects directly employed up to 4,500 locals for project coordination, storage and distribution and up to another 4,000 employees are subcontracted for transportation services.

Achieve Universal Primary Education: Water filters drastically reduce the time and cost needed for the procurement of drinkable water. The time saved can be used for more productive activities such as the education of children or economic or agricultural tasks. Better water quality also reduces the cases of illness, especially among children thereby increasing the rate of school attendance.

Combat HIV/AIDS, Malaria and Other Diseases: The LifeStraw® Family ultrafiltration mechanism has been proven to be 99.99% effective in reduction of protozoa, bacteria and viruses and comply with U.S. EPA guidelines for microbiological water quality.

Ensure Environmental Sustainability: Water filters reduce deforestation and desertification rates by reducing the use of firewood to boil water. Slowing deforestation yields direct benefits like slowing soil erosion, the destruction of natural habitats, and loss of biodiversity.

Clean, accessible water for all is an essential part of the world we want to live in and there is sufficient fresh water on the planet to achieve this. However, due to bad economics or poor infrastructure, millions of people including children die every year from diseases associated with inadequate water supply, sanitation and hygiene.

Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water. Drought in specific afflicts some of the world's poorest countries, worsening hunger and malnutrition.



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